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SYNOPSIS

GROUP CHECK DETECTORS &
CURRENT SOURCES
ELEMENT IDENT

TERM. MOD	FUNC.	TERM.	LOC.
+13	I	019,118	282
C511#		018	282
C527#		010	292
C537#		010	322
C547#	111	2F2	282
C557#	012	2F2	282
C567#	112	262	282
C577#	013	262	282
	113	262	282
C61	#	204	2C4
C62		303	204
C63		202	264
C64		302	2E4
C65		303	2F4
C66		300	2F4
C67		201	264
C68		301	264
C69	117	2C4	264
C70	017	204	282
C71	016	2E4	282
C74		115	2F4
C75		016	2F4
C76		014	2F4
C77	114	264	282
C78		014	264
L63A	#	205	264
L63B	#	206	264
	P	000	284
GRD	G	319	294

SYMBOL

118		
019	18V	
018	CS1T#	
020	CS2T#	
110	CS3T#	
111	CS4T#	
012	CS5T#	
112	CS6T#	
013	CS7T#	
113	CS8T#	

FC219
GROUP CHECK
DETECTOR &
CURRENT SOURCES

RECORD OF CHANGES:

DWG ISS	PREV FURN	STD	MFR DISC	SEE NOTE

NOTES

1. $\frac{1}{\omega}$ GROUND RETURN
2. UNLESS OTHERWISE SPECIFIED:
RESISTANCE VALUES ARE IN OHMS
CAPACITANCE VALUES ARE IN MICROFARADS
VALUES PRECEDED BY THE SYMBOL, (+)PLUS
OR (-)MINUS ARE IN VOLTS, -
3. BATTERY AND GROUND TERMINALS FOR THIS
CIRCUIT PACK ARE AS FOLLOWS:

FUNCTION	TERMINAL
+5	000
+18	019
+18	118
GRD	319
4. CURRENT DRAIN:

5V QD	10 mA
18V QD	320 mA
5. CLOSEST RECOMMENDED HORIZONTAL
MOUNTING CENTERS IS 0.500 INCH.

IC CODE	GRO TERM.	BAY TERM.
50ZR	X	X

SYSTEM USED ON	DESIGN CONTROL
NO. 2 ESS	IH
NO. 3 ESS	IH

EN-1 SERIAL	EE OR CD CLASS	DATE REUSE	REUSE REMARKS	APPRO DATE
1	—	2-25-75	AS/HRN LRE LEG RFG	1/2
2A	—	9-17-75	LRE HRN LRE LEG LRE RFG	20
3A	—	4-6-76	APPROF LRE LEG LRE RFG	20

SHEET INDEX NOTES

1. A CHANGED OR NEW SHEET WILL BE ASSIGNED THE SAME ISSUE NUMBER AS SHEET 1.
2. THE ISSUE NUMBER OF SHEET 1 IS RECOGNIZED AS THE ISSUE NUMBER OF THE WHOLE DRAWING.

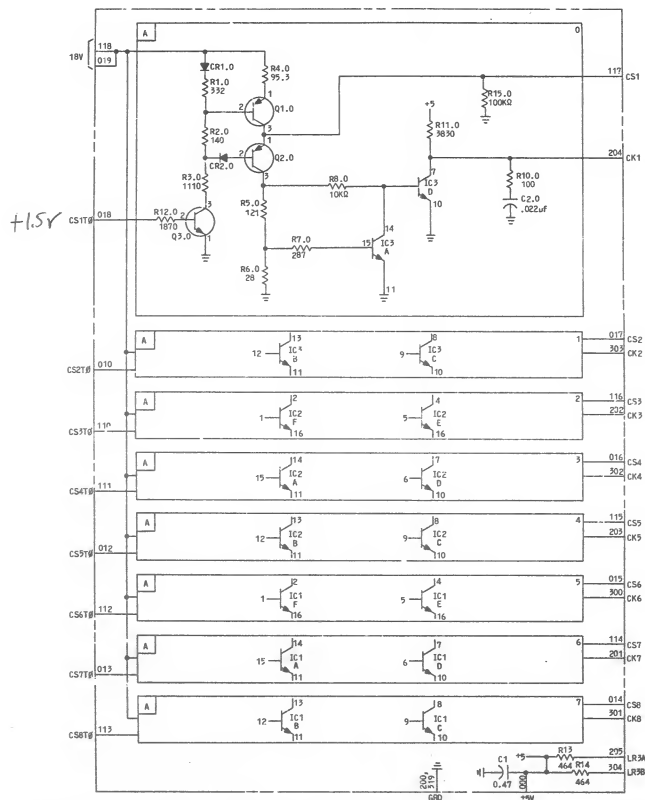
SUPPORTING INFORMATION

CATEGORY	NO.
CONNECTOR ON FRAME	947A,C,E
CIRCUIT PACK INFORMATION	
ACCEPTABLE SERIES NUMBER	4

NOTICE- NOT FOR USE ON DISCLOSURE OUTSIDE THE BENEFIT SYSTEM EXCEPT UNDER WRITTEN AGREEMENT.

FC219 CIRCUIT PACK GROUP CHECK DETECTORS AND CURRENT SOURCES CIRCUIT	1799	AT&T STANDARD
BELL TELEPHONE LABORATORIES	2 85	CPS-FC219 3 SHEETS

GROUP CHECK DETECTORS AND CURRENT SOURCES



FC219 CIRCUIT PACK

2

CPS-FC219

SHEET 2

BELL TELEPHONE LABORATORIES

6S

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ISSUE
3A

COMPONENT LIST

INTEGRATED CIRCUIT (SEE SD-2HC01-01-010)

IC1 502R			IC2 502R			IC3 502R			IC4 502R		
DESIG CODE ELEM ID			DESIG CODE ELEM ID			DESIG CODE ELEM ID			DESIG CODE ELEM ID		
A	01	203	A	01	203	A	01	204	A	01	204
F	02	205	F	02	205	F	02	205	F	02	205
C	03	204	C	03	204	C	03	204	C	03	204
D	04	204	D	04	204	D	04	204	D	04	204
E	05	204	E	05	204	E	05	204	E	05	204
G	06	205	G	06	205	G	06	205	G	06	205
H			H			H			H		

CAPACITOR

DESIG	CODE
C1	KS-19774 L5, 0.47/KS-20736 L1, D.47/KS-19774 L6, 0.47
[8]C2, 0-C2, 7	KS-19774 L5, .002

DIODE

DESIG	CODE
[8]CR1, 0-CR1, 7	4580
[8]CR2, 0-CR2, 7	4580

RESISTOR

DESIG	CODE
[8]R1, 0-R1, 7	297A, 332
[8]R2, 0-R2, 7	297A, 140
[8]R3, 0-R3, 7	297A, 110
[8]R4, 0-R4, 7	297A, 55.3
[8]R5, 0-R5, 7	297A, 121
[8]R6, 0-R6, 7	297A, 28
[8]R7, 0-R7, 7	297A, 287
[8]R8, 0-R8, 7	297A, 10,000
[8]R9, 0-R9, 7	297A, 100
[8]R10, 0-R10, 7	297A, 3300
[8]R11, 0-R11, 7	297A, 1870
[8]R12, 0-R12, 7	297A, 464
[8]R13, 0-R13, 7	KS-20209 L1, 100K0

TRANSISTOR

DESIG	CODE
[8]Q1, 0-Q1, 7	51F
[8]Q2, 0-Q2, 7	51F
[8]Q3, 0-Q3, 7	66S

CIRCUIT DESCRIPTION

FUNCTION

THIS CIRCUIT PACK PROVIDES EIGHT CURRENT SOURCES AND EIGHT CHECK CIRCUITS.

DETAILED DESCRIPTION

THIS CIRCUIT PACK CONTAINS 8 IDENTICAL CIRCUITS. WHEN TX2 CS LEAD IS TERMINATED WITH AN IMPEDANCE BETWEEN 470 AND 820 OHMS, THE CS LEAD WILL BE AT A LEVEL OF 0.9 VOLTS OR LESS. WHEN THE CS LEAD IS TERMINATED WITH AN IMPEDANCE OF LESS THAN 348 OHMS OR MORE THAN 1200 OHMS, THE CS LEAD WILL BE AT 14.0 VOLTS ± 10 PERCENT. THE CS LEAD IS CAPABLE OF SUPPLYING 35 MILLIAMPERES. THE CS LEAD IS CAPABLE OF SINKING AT LEAST 7.5 MILLIAMPERES. CURRENT IS SUPPLIED ONLY WHEN THE INPUT LEAD (CSLTD) IS AT 1.5V OR HIGHER.

LEAD DESIGNATION

NAME	MEANING
18V	18 VOLT SUPPLY TO THE CIRCUIT PACK
CS1-CX5	CURRENT SOURCE CHECK OUTPUT 1 - CURRENT SOURCE CHECK OUTPUT 5
CS1-CS3	CURRENT SOURCE 1 OUTPUT - CURRENT SOURCE 3 OUTPUT
CS10-CS8TD	CURRENT SOURCE 1 TURN ON CURRENT SOURCE 8 TURN ON

ISSUE
3A

FC219 CIRCUIT PACK

CELL TELEPHONE LABORATORIES

(2)
6SCPS-FC219
SHEET 3
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